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FEDERAL COMMUNICATIONS COMMISSION
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LATE FILED

November 9, 1998

**EX PARTE**

Ms. Magalie Roman Salas
Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

**Re: CC Docket 95-116, Telephone Number Portability**

Dear Ms. Salas:

On November 6, 1998, Michael O'Connor, Colleen Baum and the undersigned, representing Bell Atlantic, met with staff of the Common Carrier Bureau. The purpose of the meeting was to discuss the types of costs Bell Atlantic incurred to implement local number portability consistent with the 1996 Act's requirements and the Commission's implementing regulations. A copy of the handout distributed in the meeting is attached.

Please include a copy of this correspondence in the public record of the above-captioned proceeding.

Sincerely,

Attachment

cc: K. Monteith
C. Barnekov
L. Collier
A. Janson-Curtis
R. Lien
A. Rausch
J. Scott
L. Seltzer
J. Sievert
J. Simons

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LIST A B C D E

# LNP Implementation

## Bell Atlantic LNP Costs

# LNP Costs

- NPAC
- LNP Hardware & Software
- SS7 Network Modifications
- Implementation Costs
- Switch Generic Upgrades
- OSS - New & Modified

***Comments reflect general agreement that the following costs were triggered by LNP and are recoverable:***

- LNP Hardware & Software
  - Number portability databases
  - Switch processor upgrades to handle LNP queries
  - LRN software
- SS7 Network Modifications
  - Two types of modifications were made to handle LNP query traffic
    - Brand new links
    - Augments to existing links
- Implementation Costs
  - Testing, engineering & translations
  - Maintenance and administration
  - Product management
- Switch Generic Upgrades

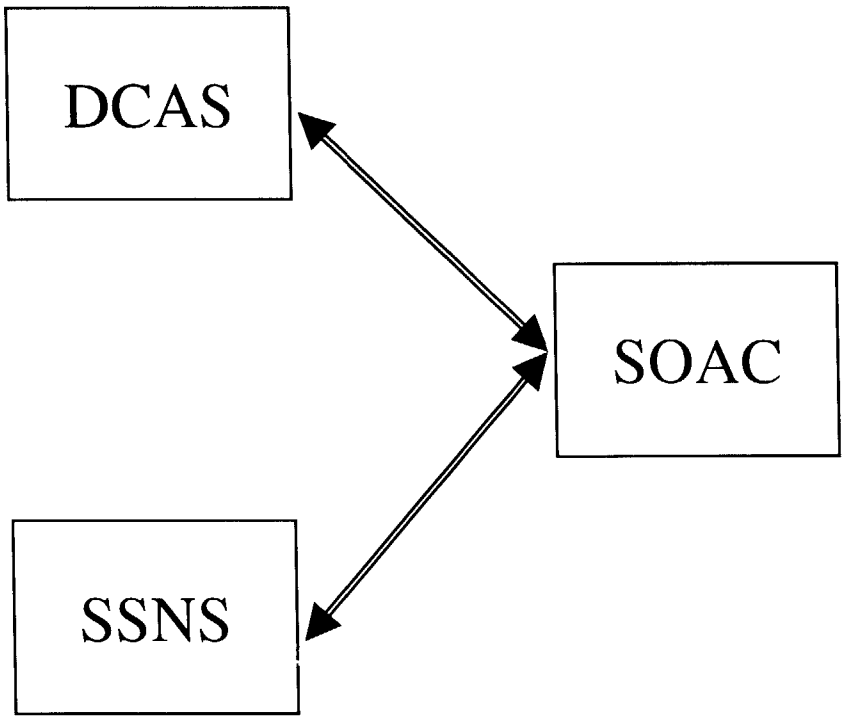
# LNP Impact On OSSs
# New & Modified System Requirements

- Act requires number portability be implemented "without impairment of quality, reliability, or convenience."
- LNP required a fundamental change to the design and operation of the public switched network
  - Prior to LNP, network elements and operating systems used NPA-NXX (switch-based) data
  - Post LNP, a 10-digit TN + LRN are required to establish and maintain service and to properly route calls
- LNP required new OSSs to establish interfaces and data exchanges between BA and the NPAC
- LNP required modifications to over 20 OSSs to enable recognition and proper processing of ported TNs

# Provisioning OSS Flow

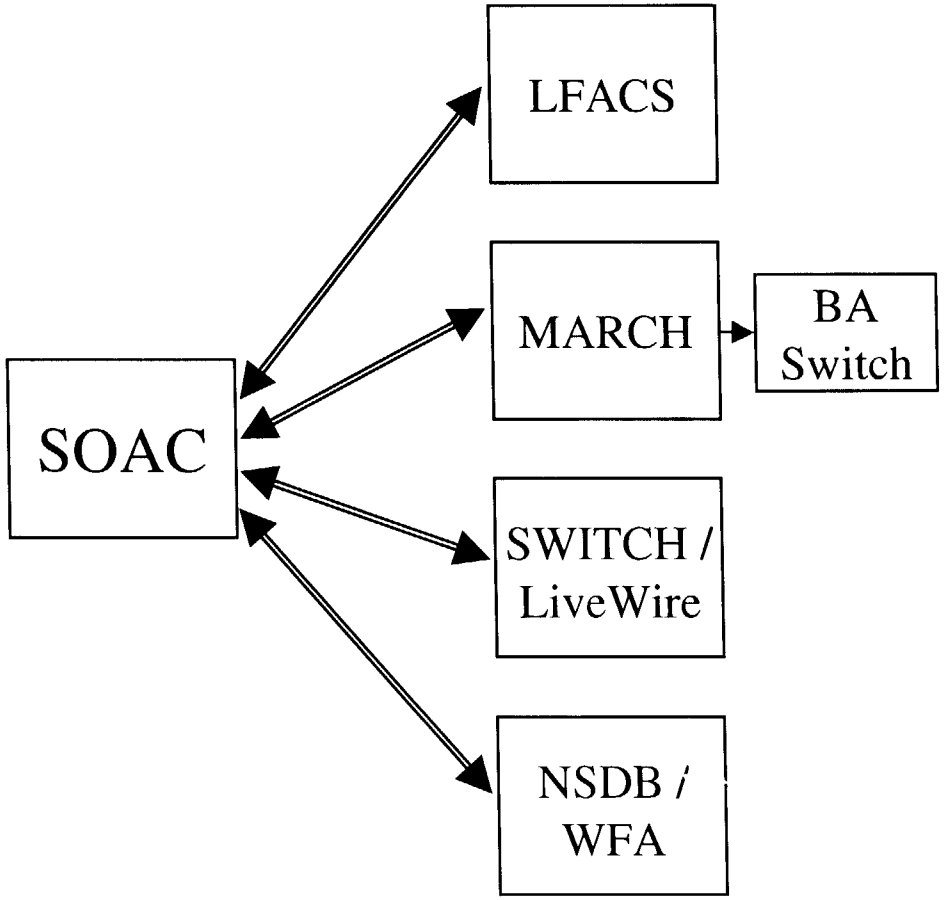
**<u>DCAS</u> - provides CLEC personnel with access to service order system for service order entry**

**SSNS - provides BA personnel with access to service order system for service order entry.**

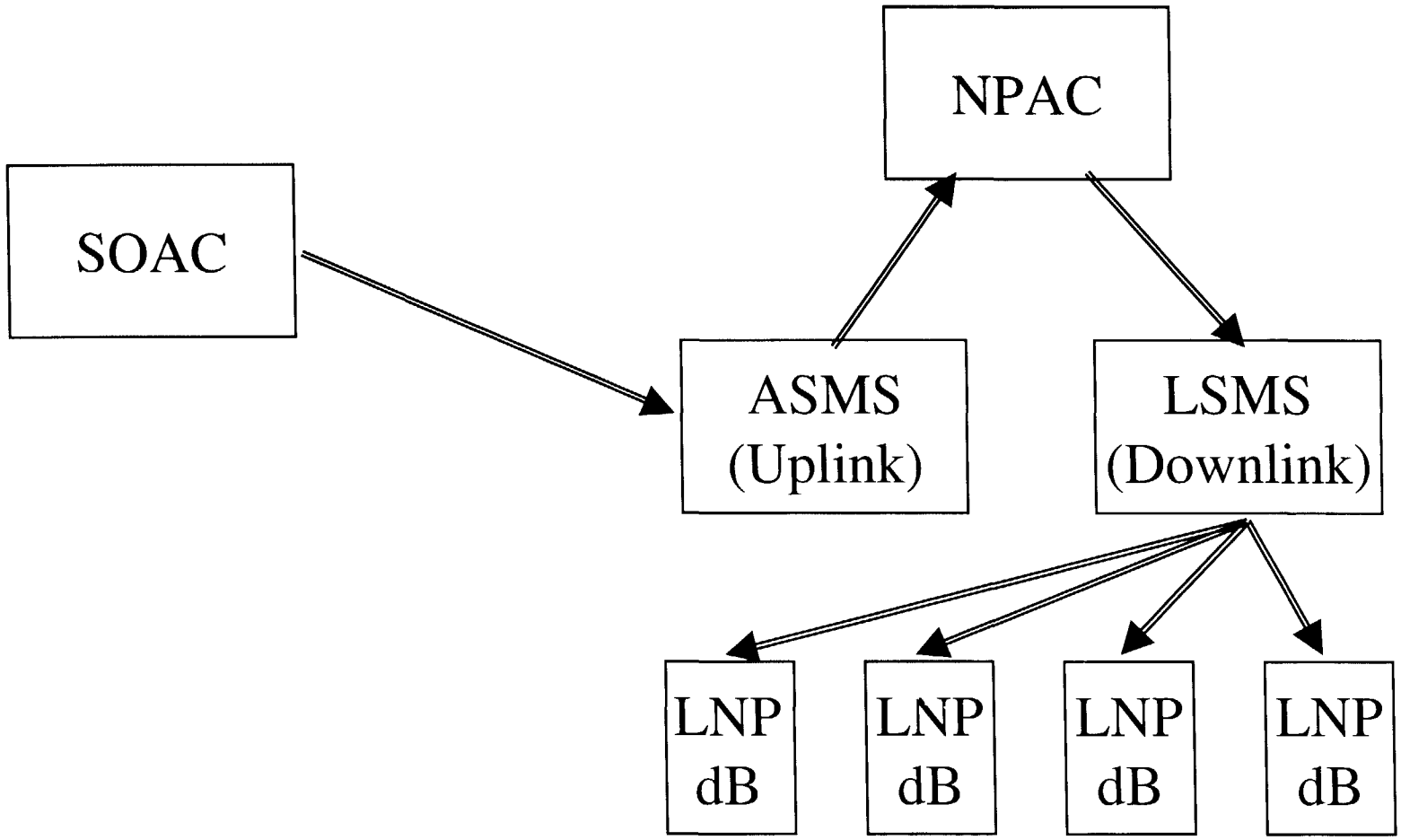


# Provisioning OSS Flow

**SOAC - Control & Coordination system for all order activity**
**LFACS - identifies the switch and other physical facilities needed to complete the order**
**MARCH - transmits service order information to the switch serving the customer**
**SWITCH / LiveWire - TN inventory & administration system which assures ported-out TNs are not reused and ported-in TNs are returned**
**NSDB/WFA - system used by field technicians to access data to complete a service order**



# Provisioning OSS Flow



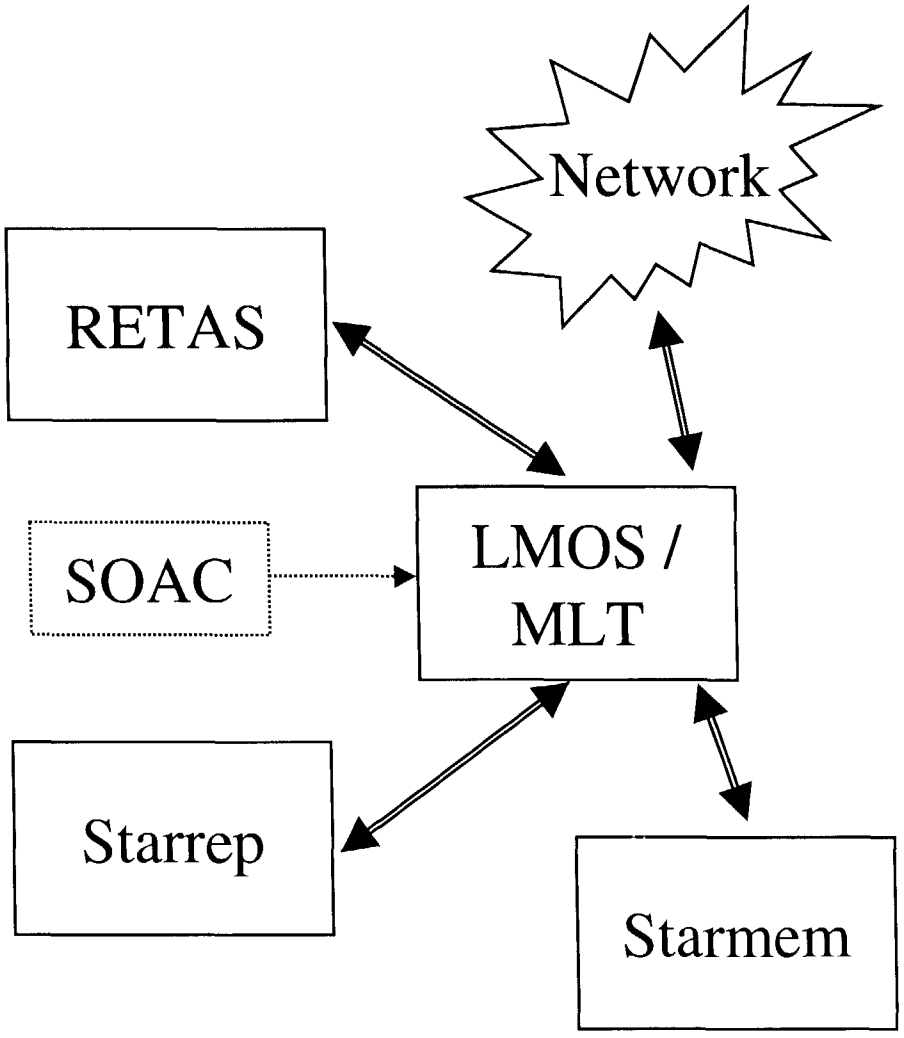
# Maintenance OSS Flow

**LMOS / MLT - primary customer trouble report maintenance system. This system also performs mechanized loop testing on residence and business lines at the time a trouble is reported.**

**RETAS - provides CLEC personnel with access to LMOS / MLT**

**Starrep - provides BA repair attendant with access to LMOS / MLT**

**Starmem - queries billing, Switch and LMOS records for trouble resolution**

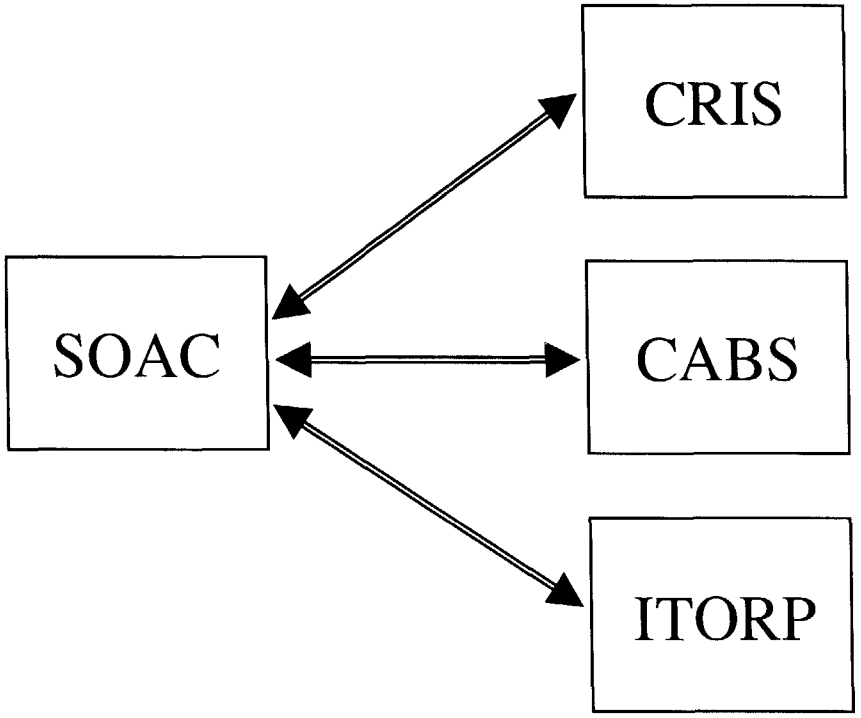


# Billing OSS Flow

**CRIS - billing system for residence and business customers**

**CABS - billing system for carriers**

**ITORP - billing systems for independent telcos**



# Other OSSs

**DBAS / VSOP - OSSs that support the Line Information dB. Modifications permitted individual TN account management (as opposed to NPA-NXX). Without changes BA ported-in customers would not have access to the same services as non-ported customers**

**E911 - modified to permit ILEC and CLEC access to the system at the individual TN level. Without the modifications, ILECs or CLECs would not be able to access the records of customers who port their TNs**

**InPlans / ITE - enables engineers to plan for network expansion. Without the modification the systems would be unable to recognize the databases at the core of the LNP network overlay.**

# Network Surveillance OSS

**Netminder - system that monitors overall LNP traffic and switch performance to isolate and resolve problems before they become customer service affecting.**

**TNM - network monitoring system updated to recognize and handle LNP components**

**Predictor - system that proactively performs random off-peak testing of customer lines to identify and resolve emerging problems before they become customer service affecting.**